

USSR

BOGDANOVICH, S. YA., et al., 11-ya Vses. Konf. po Vopr. Ispareniya, Gorennya i Gaz. Dinamiki Dispersn. Sistem, 1972, p 17

variation of surface tension of carbon dioxide condensate in wide range of pressures (1 to 100 atm) was investigated.

It is shown that pressure has a pronounced effect on the surface tension of the condensate ($\sigma = 22.5$ dyn/cm at 1 atm, $\sigma = 13$ dyn/cm at 50 atm), the resulting modul radius of the droplet varies from 150 to 39 mcm respectively.

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AKSENOV, V. A., et al, Farmakologiya i Tseksikologiya, Vol 33, No 6, Nov/Dec
70, pp 726-733

1/2 023 UNCLASSIFIED PROCESSING DATE--20NOV70
TITLE--3,5,3 PRIME,5 PRIME,TETRABROMO,2,4,2 PRIME,4
IMPROVED 4-AMINO-2-PHENYL COMPOSITIONS FOR TREATING VIRAL EYE DISEASES
AUTHOR--(G4)-NIKOLAIEVA, I.S., KRAT, N.M., PERKIN, C.H., RYAN, N.S.
COUNTRY OF INFO--USSR
SOURCE--FR. DEMANDE 2,007,474
DATE PUBLISHED--09JAN70
SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--DRUG, EYE DISEASE, PATENT, VIRUS DISEASE
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY FILE/FRAPE--300471079 STEP NO--FR/000070/000/000/0000/0000
CIRC ACCESSION NO--A00131626
UNCLASSIFIED

2/2 023

UNCLASSIFIED

PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AA0131626

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE TITLE COMPD. (TEBROPHEN) AS SUCH OR IN 0.1, 0.25, AND 1PERCENT OINTMENTS IN VASELINE (VASELINE 80, VASELINE OIL 20PERCENT) IS EFFECTIVE IN VIRAL EYE INFECTIONS, INCLUDING VARIOUS FORMS OF HERPETIFORM KERATITIS. HUMAN TESTS SHOWED RELIEF IN 3-5 DAYS AND CURE IN 10-14 DAYS. TEBROPHEN IS ALSO EFFECTIVE IN OTHER VIRAL INFECTIONS. FACILITY: CRDZHONIKIDZE, S., ALL UNION SCIENTIFIC RESEARCH CHEMICAL PHARMACEUTICAL INSTITUTE.

UNCLASSIFIED

USSR

UDC 535.379:576.851.5

DOSKOCH, Ya. Ye., PARKHOMENKO, I. M., BOGDANOVA, N. V., MAZOKHINA, N. N.,
and TARUSOV, B. N., Moscow State University and All-Union Institute of the
Canning and Vegetable-Drying Industries

"Spontaneous and Induced Chemoluminescence of Spores From Thermophilic
Microorganisms in Relation to Their Thermostability"

Moscow, Mikrobiologiya, No 5, 1971, pp 849-857

Abstract: Study of spores from the thermophilic strain *Bacillus aerothermophilus* showed that they do not luminesce spontaneously whether heated or not. However, passage of an electrical current through unheated spore suspensions induced luminescence at a constant level. The intensity was much lower than the luminescence emitted by suspensions heated to 120 to 130°C and the shape of the kinetic curve was much different. The intensity of luminescence was a function of the duration of heating, the maximum occurring after all the spores were killed due to destruction of the spore coat. High temperatures also affected the electrical conductance of the suspensions. In suspensions heated to 120°C the maximum current intensity occurred after 90 minutes, whereas in suspensions heated to 130°C it occurred after 3 minutes, the time when all the spores were killed, i.e., the current intensity varied with the number of dead microorganisms.

1/1

1/2 015 UNCLASSIFIED PROCESSING DATE--04DEC70
TITLE--MECHANISM OF CARBON DIOXIDE FORMATION IN THE OXIDATIVE
DEHYDROGENATION OF ETHYLBENZENE TO STYRENE -U-
AUTHOR--(04)-ISAGULYANTS, G.V., BOGDANOVA, O.K., BELOMESTNYKH, I.P.,
ROZHDESTVENSKAYA, N.N.
COUNTRY OF INFO--USSR
SOURCE--NEFTEKHIMIYA 1970, 10(2), 174-7
DATE PUBLISHED-----70

SUBJECT AREAS--CHEMISTRY, NUCLEAR SCIENCE AND TECHNOLOGY

TOPIC TAGS--CARBON DIOXIDE, DEHYDROGENATION, ETHYLEBENZENE, STYRENE,
CARBON ISOTOPE, OXIDATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--3006/0959

STEP NO--UR/0204/70/010/002/0174/0177

CIRC ACCESSION NO--AP0134677

UNCLASSIFIED

2/2 015

UNCLASSIFIED

PROCESSING DATE--04DEC70

CIRC ACCESSION NO--AP0134677

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE TITLE MECHANISM WAS STUDIED BY THE KINETIC ISOTOPE METHOD, USING STYRENE (I), PRIME14 C. I WAS THE ONLY PRECURSOR OF CO SUB2. THE CATALYST MGO, (NH SUB4) SUB2, MOO SUB4 HAD HIGH SELECTIVITY FOR THYOXIDATIVE DEHYDROGENATION OF ETPH TO I.
FACILITY: INST. ORG. KHIM. IM. ZELINSKOGO, MOSCOW, USSR.

UNCLASSIFIED

1/2 013 UNCLASSIFIED PROCESSING DATE--16OCT70
TITLE--INDIRECT POLAROGRAPHIC DETERMINATION OF PHENOTHIAZINE -U-
AUTHOR-(03)-TURYAN, YA.I., MEKRYUKOVA, T.V., BOGDANOVA, O.V. *B*
COUNTRY OF INFO--USSR
SOURCE--ZH. ANAL. KHIM. 1970, 25(2), 384-6
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--POLAROGRAPHIC ANALYSIS, ORGANIC AZINE COMPOUND, BENZENE
DERIVATIVE, NITRATION, ORGANIC SULFUR COMPOUND, DROPPING MERCURY
ELECTRODE
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1993/0686 STEP NO--UR/0075770/0257002/038470386
CIRC ACCESSION NO--AP0113557
UNCLASSIFIED

2/2 013
 CIRC ACCESSION NO--AP0113557 UNCLASSIFIED PROCESSING DATE--16OCT70
 ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AS INDIRECT POLAROGRAPHIC METHOD
 FOR PHENOTHIAZINE ON A DROPPING HG ELECTRODE WAS DEVELOPED. THE METHOD
 IS BASED ON NITRATION AND OBTAINING THE CATHODIC POLAROGRAPHIC WAVE.
 THE NITROSCAMINE FORMED GIVES A REDN. WAVE ON A DROPPING HG ELECTRODE
 WITH E SUBONE HALF EQUALS MINUS 0.93 IN A SUPPORTING ELECTROLYTE OF NA
 SUB2 SO SUB4 (SATD.) PLUS 0.04M NAOH PLUS 14PERCENT H SUB2 O PLUS
 18PERCENT MECH PLUS 68PERCENT ETOH. TO 1 G OF THE SAMPLE IN HCONME SUB2
 OR MECH, ADD 9 ML MECH, 2 ML 6M NANO SUB2, AND 1 ML 2N H SUB2 SO. AFTER
 10 MIN ADD 4 ML 2.5N NAOH AND DIL. TO 50 ML WITH ETOH. RECORD THE
 POLAROGRAM IN THE POTENTIAL RANGE OF MINUS 0.5 TO MINUS 1.4V. THE
 SENSITIVITY OF THE DETN. IS 5 TIMES 10 PRIME NEGATIVE3 PERCENT. THE
 ERROR IS PLUS OR MINUS 5PERCENT. FACILITY: SCI. RES. INST.
 MONUMERS. SYN. RUBBERS, YAROSLAYL, USSR.

UNCLASSIFIED

1/2 017 UNCLASSIFIED PROCESSING DATE--30OCT70
TITLE--INDIVIDUAL HYDROCARBON COMPOSITIONS OF THE BENZENE, TOLUENE, XYLENE
FRACTION OF LIGHT PYROLYSIS TAR -U-
AUTHOR-(03)-BOGDANOVA, T.A., KHALILOVA, SH.A., KAMBAROV, YU.G.
CCOUNTRY OF INFO--USSR
SOURCE--NEFTEPERERAB. NEFTEKHIM. (MOSCOW) 1970, (2), 28-9
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--HYDROCARBON, BENZENE, TOLUENE, XYLENE, KEROSENE, GAS OIL,
PETROLEUM FRACTION, STYRENE, PYROLYSIS
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1997/0790 STEP NO--UR/0318/70/000/002/0028/0029
CIRC ACCESSION NO--AP0119697
UNCLASSIFIED

2/2 017

UNCLASSIFIED

PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0119697

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A MIXT. OF CRACKING KEROSINE AND STRAIGHT RUN GAS OIL WAS SUBJECTED TO PYROLYSIS AT 740DEGREES AND 3 SEC CONTACT TIME WITH 11PERCENT STEAM, GIVING 20PERCENT LIGHT TAR. THE LATTER YIELDED 38.08PERCENT FRACTION B. SMALLER THAN OR EQUAL TO 145DEGREES AND CONTG. C SUB6 H SUB6 37.12, PHME 32.05, XYLENES 11.26, PHET 3.39, STYRENE 1.31, AND 14.87 WT. PERCENT NONAROMATIC HYDROCARBONS. IN THE FRACTION, 68 COMPONENTS WERE DETD., 48 OF WHICH WERE IDENTIFIED.

UNCLASSIFIED

USSR


UDC 576.851.49.094.85:615.371:851.497.012.6

BOGDANOVA, V. V., STANISLAVSKIY, YE. S., MATER, G. A., and NEGINA, YU. P.,
Gor'kiy Institute of Epidemiology and Microbiology and Moscow Institute of
Vaccines and Sera imeni Mechnikov

"Protective Properties of Cell Fractions and Mixtures of Isolated from the
Vi-Positive Strain of Typhoid Bacillus"

Moscow, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 12, 1971,
pp 87-89

Abstract: Various cell fractions isolated from S. typhi Ty₂ 4446 (capsular substance, cell walls, culture fluid, capsular substance + cell walls, culture fluid + cell walls) were tested as vaccines in mice. Two weeks after the mice were vaccinated, they were infected with a virulent strain of S. typhi Ty₂ 4446 (LD₅₀ 13 million cells). The mixture of cell walls and culture fluid proved to be the most efficacious in protecting mice infected with 5 LD₅₀ of typhoid bacillus. Both fractions possess little toxicity for mice and contain protective Vi and O antigens (whose macromolecular organization is close to the crude antigens in the original microbial cell). Unlike corpuscular vaccine, they do not contain intracellular components that may have immunodepressive activity or stimulate the synthesis of auto-antibodies. 1/1

1/2 014 UNCLASSIFIED PROCESSING DATE--13NOV70
TITLE--IMMUNOELECTROPHORETIC ANALYSIS OF THE S. TYPHI TY SUB2 ANTIGENIC
COMPLEX -U-
AUTHOR--(02)--BOGDANOVA, V.V., MATER, G.A. 
COUNTRY OF INFO--USSR
SOURCE--ZHURNAL MIKROBIOLOGII, EPIDEMIOLOGII I IMMUNOBIOLOGII, 1970, NR 4,
PP 25-28
DATE PUBLISHED-----70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--TYPHOID FEVER, O ANTIGEN, ELECTROPHORESIS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1990/1472

STEP NO--UR/0016/70/000/004/0025/0028

CIRC ACCESSION NO--AP0109532

UNCLASSIFIED

2/2 014
CIRC ACCESSION NO--AP0109532

UNCLASSIFIED

PROCESSING DATE--13NOV70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. BOIVIN ANTIGEN OBTAINED FROM TYPHOID STRAIN TY SUB2 4446 WAS SUBJECTED TO IMMUNOELECTROPHORETIC ANALYSIS; INDIVIDUAL COMPONENTS OF THE COMPLEX AND THEIR INTERACTION WERE CHARACTERIZED. AS DEMONSTRATED, VI ANTIGEN WAS BOUND BY THERMOLABILE BOND WITH THE O ANTIGENIC COMPLEX, APPARENTLY WITH ITS PROTEING COMPONENT; AS A RESULT, AN ANODE O FRACTION WAS DETECTED IN IMMUNOELECTROPHORESIS. THE THERMOLABILE BOND WAS DISRUPTED ON HEATING, AND THE O ANTIGENIC COMPLEX ACQUIRED A MOBILITY IN THE ELECTRIC FIELD CHARACTERISTIC OF TYPHOID O ANTIGEN IN THE DIRECTION OF THE CATHODE.

UNCLASSIFIED

USSR

UDC 666.321:622.765

KUZOVLEV, A. K., Candidate of Technical Sciences, IGNATENKOVA, N. I., Engineer, MAL'TSEVA, I. I., Engineer, and BOGDANOVA, Ye. D., Engineer, Central Asian Scientific Research Institute of Geology and Mineral Raw Material

"Experience in Centrifugal Floating Classification of Angrensk Kaolins in Hydraulic Turbocyclone"

Moscow, Steklo i Keramika, No 2, 1973, pp 25-26

Abstract: Experiments of flotation of kaolins were conducted on TTs-1D (TVN-75) turbocyclone and GTN-200 laboratory hydraulic turbocyclone by the Khimgeolnerud expedition at the Angrensk Research Station, in order to investigate a possible increase of the effectiveness of flotation of secondary kaolins. The centrifugal floating classification on the GTN-200 turbocyclone revealed that a high-quality kaolin concentrate with up to 32-34 % alumina content can be produced. This kaolin does not get worse with increasing density of the processed pulp and it is practically not inferior that the kaolin concentrated on NOGSh-325 scroll centrifuge. Three tables, one bibliographic reference.

1/1

USSR

UDC 595.771/.772-19(470.46)

POTAPOV, A. A., VLADIMIROV, V. V., MEL'NIK, T. D., and BOGDANOVA, Ye. N.,
Institute of Medical Parasitology and Tropical Medicine imeni Ye. I. Mart-
sinovskiy, Ministry of Health USSR, Moscow

"The Species Composition and Diurnal Activity of Mosquitoes and Gadflies in
the Lower Volga Delta"

Moscow, Meditsinskaya Parazitologiya i Parazitarnyye Bolezni, Vol 42, No 1, Jan/
Feb 73, pp 5-11

Abstract: Observations carried out in the lower Volga delta (Obzhorsk district
of the Astrakhan' Reservation) through Jun/Aug in 1966-67 indicated that 6
mosquito species, 12 gadfly species, and 2 gnat species breed there. The most
numerous species of mosquitoes were *Aedes vexans* and *Anopheles hircanus* and the
most numerous species of gadflies *Hybomitra acuminatus* and *H. peculiaris* and also
(in 1966, a year of high floods) *Chrysops relictus* and *Chr. flavipes*. The
maximum activity of mosquitoes and gnats, as far as attacks on humans were con-
cerned, was in the morning and evening hours, and the maximum activity of gad-
flies in the daytime. Among mosquitoes only *Ae. vexans* and *Ae. caspius* attacked
in the daytime in the shade - *An. hircanus*, *An. maculipennis*, and *Mansonia*
richiardii mosquitoes became active in the cool air after dark. Of gadflies
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POTAPOV, A. A., et al., Meditsinskaya Parazitologiya i Parazitarnyye Bolezni, Vol 42, No 1, Jan/Feb 73, pp 5-11

with mass occurrence the most thermophilic were *Chr. relictus* and *H. peculiaris*, which attacked at the hottest time in the afternoon. In the evening, when inversion air currents developed, *A. vexans* mosquitoes were displaced upwards to the tree tops.

2/2

1/2 015 UNCLASSIFIED PROCESSING DATE--23OCT70
TITLE--FREE SUBUNITS OF RNA POLYMERASE IN NORMAL AND PHAGE INFECTED CELLS
OF E. COLI -U-
AUTHOR-(04)-BOGDANOVA, YE.S., ZOGRAF, YU.N., BASS, I.A., SHEMYAKIN, M.F.
COUNTRY OF INFO--USSR **B**
SOURCE--MOLEKULYARNAYA BIOLOGIYA, 1970, VOL 4, NR 3, PP 435-444
DATE PUBLISHED-----70
SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--ESCHERICHIA COLI, PHAGE, RNA, ENZYME
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1999/0386 STEP NO--UR/0463/70/004/003/0435/0444
CIRC ACCESSION NO--AP0122567
UNCLASSIFIED

2/2 015

UNCLASSIFIED

PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0122567

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE ADDITION OF SUPERNATANTS OBTAINED AFTER ULTRACENTRIFUGATION (5.5 HOURS; 300,000 G) OF THE NONINFECTED CELLS LYSATES OF E. COLI (STRAINS B, 3.050, TS 19) RESULTS IN A SHARP INCREASE OF ACTIVITY OF THE HEATED E. COLI RNA POLYMERASE. THIS ACTIVATION IS CONNECTED WITH SMALL PARTICLES (SIMILAR TO 3-5S) AND IS ELIMINATED BY ANTIBODIES AGAINST PURIFIED E. COLI RNA POLYMERASE. THE INCREASE OF ACTIVITY OF THE HEATED ENZYME IS, THEREFORE, DUE TO THE PRESENCE OF THE SMALL COMPONENT OF POLYMERASE IN THE ULTRACENTRIFUGATES THAT MAKES POSSIBLE THE RECONSTRUCTION OF THE ENZYME FROM THE SMALL AND THE LARGE SUBUNITS. THE ULTRACENTRIFUGATE OF E. COLI B CELLS INFECTED WITH THE PHAGE T2 OR T4 OR WITH AN AMBER MUTANT N122 OF PHAGE T4, AS A RULE, DOES NOT ACTIVATE THE HEATED ENZYME. MOREOVER, IT SIGNIFICALLY INHIBITS THE RNA SYNTHESIS CATALYZED BY THE MIXTURE OF THE HEATED ENZYME AND THE ULTRACENTRIFUGATE FROM NONINFECTED CELLS, BUT DOES NOT AFFECT THE ACTIVITY OF THE NATIVE RNA POLYMERASE. INHIBITION IS NOT OBSERVED IN THE CASE WHEN THE RECONSTRUCTED ENZYME HAS ALREADY BEGUN TO SYNTHESIZE RNA BEFORE THE ADDITION OF THE ULTRACENTRIFUGATE FROM INFECTED BACTERIA. THE DATA OBTAINED MAKE IT POSSIBLE TO CONCLUDE THAT THE LYSATES OF THE INFECTED CELLS CONTAIN INHIBITOR WHICH SPECIFICALLY PREVENTS RECONSTRUCTION OF ACTIVE RNA POLYMERASE FROM ITS LARGE AND SMALL SUBUNITS. THE SUM OF RESULTS INDICATES THAT A MECHANISM OF REGULATION OF RNA POLYMERASE ACTIVITY MAY EXIST IN THE CELL, THAT ACTS ON THE LEVEL OF ASSOCIATION OF THE LARGE AND SMALL SUBUNITS OF THIS ENZYME.

FACILITY: INSTITUTE OF ATOMIC ENERGY, USSR, MOSCOW.

UNCLASSIFIED

USSR

UDC: 62-278.001.2

ANDREYEVA, L. Ye., Candidate of Technical Sciences, and BOGDANOVA, Yu. A.

"Designing Corrugated Diaphragms in Accordance With a Specified Characteristic"

Moscow, Pribory i sistemy upravleniya, No 6, 1972, pp 37-39

Abstract: In an earlier article published in this same journal (Metodika proyektirovaniya gofirovannykh membran -- A Method of Designing Corrugated Diaphragms -- No 9, 1969) the first of the authors named above offered a method for designing such diaphragms in accordance with a characteristic specified by the stiffness and nonlinearity of the diaphragm. In the present article, the authors consider the more complex case in which the elasticity characteristic in the form of a function of the pressure, and its tolerated field, are both specified. The problem the article sets out to solve is to select a diaphragm geometry such that the demands of characteristic, tolerated voltages, and the dimensions of the sensitive element are satisfied. The method is primarily graphic, and the curves used in carrying it out are reproduced. The characteristic of experimental specimens prepared by this method was found to be in close agreement with the specified characteristic.

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USSR

UDC 621.374.4

BOGDANOVICH R.M. [Moscow Radio Engineering Institute]

"Calculation Of Aperiodic Multipliers Of The Frequency Of Harmonic Oscillations In A Dynamic Regime [Presented By Academician Of The AS, BSSR, Ye.G.Konovalov]"

Doklady Akademii Nauk BSSR, Vol XVI, No 7, July 1972, pp 610-613

Abstract: The spectrum is studied of the output oscillations of a multiplier, with a number of factors impairing the "purity" of the multiplier taken into account. The relations between the quality indices of the multiplier are found. The possibility is considered of a synthesis of aperiodic multipliers with arbitrary R_p, R_{load} and a high degree of "purity." The effect is studied of the parasitic elements of a multiplier circuit on its stability and the spectrum of the output oscillations. Two equivalent circuits of an aperiodic multiplier are shown: 1) Series, where $u = U \cos \omega t$, $i = I \cos n\omega t$; and 2) Parallel, where $u = U \cos n\omega t$, $i = I \cos \omega t$. In the paper the series-type frequency multiplier is studied. However, from considerations of duality, the results of the analysis conducted can be extended to the parallel type. 1 tab. 1 fig. 9 ref. Received, 6 December 1971.

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USSR

UDC $\Delta 621.3.032.269.1$

BOGDANOVICH, B. Yu., VORONKOV, R. N., GASS, V. F., and DANILICHEV,
V. A.

"Autoelectronic Beam for Linear Electron Accelerators"

Moscow, Priroda i Tekhnika Eksperimenta, No. 1, January-February,
1971, pp 44-46

Abstract: The authors present the results of their measurements of electron beam parameters from a gun designed to inject electron bunches throughout a phase of $30-40^\circ$ and with an energy of 300-400 keV in the accelerating section, with a constant phase velocity equal to that of light and a field intensity of 100 kV/cm. They also describe the equipment they used to make these measurements. A cross-sectional drawing of the electron gun in this device is given and its dimensions specified. A "Nord-10" and a "Nord-100," both of them electric discharge pumps, were used to obtain the required degree of evacuation, which was from $2 \cdot 10^{-6}$ to $5 \cdot 10^{-6}$ mm Hg for the first experimental run. A block diagram of the entire equipment is given as well as curves for the equipment characteristics and for the results obtained. All measurements, lasting for 20 hours, were made with the same cathode, which underwent no change in dimensions. 1/1

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Acc. Nr.: AP0029510

Ref. Code: UR 0240

PRIMARY SOURCE: Gigiyena i Sanitariya, 1970, Nr 1, pp 61-66

FEATURES TO PECULIAR GLOBAL CESIUM-137
AND STRONTIUM-90 REACHING THE POPULATION
OF POLECIA BY DIFFERENT FOOD SUPPLY ROUTES

A. N. Marey, R. M. Barkhudarov, V. K. Chumak, E. V. Petukhova,
E. B. Tyuryukanova, G. A. Kuznetsova, N. Ya. Novikova,
S. B. Pozhivilova, G. A. Bogdanovich

The paper presents investigation data on the order of passage of abovementioned isotopes from the soil into food products with due regard for the soil nature and the accumulation of isotopes in the human body. The finding was that the extent of the passage of cesium-137 from the soil into food products fluctuated considerably and depended on the type of soil. Thus, in a soil consisting mainly of a sand fraction the passage of cesium-137 was more pronounced. Similar observation were made in respect to all of the objects examined. However, no differences in the migration of strontium-90 could be detected. Due to the high passage of cesium-137 into food products its content in the human body was high as well.

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REEL/FRAME

gm
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19921111

1/2 018 UNCLASSIFIED PROCESSING DATE--27NOV70
TITLE--COMPLEX STRUCTURE AND SURFACE ENERGY OF BINARY METALLIC MELTS -U-
AUTHOR--(04)-VOROBYEV, YU.P., BOGDANOVICH, M.P., MEN, A.N., CHUFAROV, G.I.
COUNTRY OF INFO--USSR
SOURCE--FIZ. METAL METALLOVED. 1970, 29(2), 445-8
DATE PUBLISHED-----70
SUBJECT AREAS--MATERIALS
TOPIC TAGS--LIQUID BINARY ALLOY, SURFACE TENSION, FLUID STRUCTURE, SURFACE
ENERGY, ALLOY COMPOSITION, MODEL
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3003/0355 STEP NO--UR/0126/70/029/002/0445/0448
CIRC ACCESSION NO--AP0129587
UNCLASSIFIED

2/2 018

UNCLASSIFIED

PROCESSING DATE--27NOV70

CIRC ACCESSION NO--AP0129587

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AN INTERPRETATION WAS PERFORMED OF CONCN. DEPENDENCE OF SURFACE TENSION OF BINARY METALLIC MELTS IN A COMPLEX MODEL. THE NONPARTICIPATION OF INTRACOMPLEX BINDING ENERGIES IN THE TOTAL SURFACE TENSION OF THE MELT AND THE DEVELOPMENT IN THE SURFACE TENSION OF ONLY WEAKER INTERACTIONS BETWEEN THE COMPLEXES AND THE ATOMS OF THE REDISUAL COMPONENT WERE ASSUMED IN THIS INTERPRETATION. THE PARAMETERS FOUND FOR SEVERAL SYSTEMS ARE TABULATED. IN THE OPINION OF THE AUTHORS, THE PROPOSED MODEL FOR THE STRUCTURE OF BINARY METALLIC MELTS IS RATHER GENERAL, AT LEAST AT 1ST GLANCE. THE FOLLOWING SYSTEMS WERE CONSIDERED: PD,NI, PD,CO, PD,CU, SN,CI, AND SN,PB. FOR THE SN,BI SYSTEM, THE COEFF. OF THE WEAKENING OF THE BI,BI BOND WAS EQUAL TO ZERO. FACILITY: INST. MET., SVERDLOVSK, USSR.

UNCLASSIFIED

1/2 029 UNCLASSIFIED PROCESSING DATE--27NOV70
TITLE--THEORY OF PHASES OF VARIABLE COMPOSITION AND DEFECT CONTENT -U-
AUTHOR-(04)-MEN, A.N., BOGDANOVICH, M.P., VOROBYEV, YU.P., CHUFAROV, G.I.
COUNTRY OF INFO--USSR **B**
SOURCE--IZV. AKAD. NAUK SSSR, METAL. 1970, (2), 135-43
DATE PUBLISHED-----70
SUBJECT AREAS--PHYSICS
TOPIC TAGS--PHASE COMPOSITION, CRYSTAL DEFECT, METAL PROPERTY, MATHEMATIC
MODEL
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--2000/1233 STEP NO--UR/0370/70/000/002/0135/0143
CIRC ACCESSION NO--AP0124837
UNCLASSIFIED

2/2 029

UNCLASSIFIED

PROCESSING DATE--27NOV70

CIRC ACCESSION NO--AP0124887

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A MATHEMATICAL TREATMENT OF PHENOMENOL. THEORY OF PHASES OF VARIABLE COMPN. AND VARIABLE DEFECT CONTENT WAS CARRIED OUT IN ORDER TO INTERPRET THE PROPERTIES OF THE PHASES. THE TREATMENT IS BASED ON THE REPRESENTATION OF A REAL SYSTEM CONSISTING OF NONINTERACTING SUBSYSTEMS (CLUSTER COMPONENTS), EACH OF WHICH FORMS A DEFINITE PART OF THE PROPERTY OF THE SYSTEM IN QUESTION.

UNCLASSIFIED

USSR

UDC: 532.529

BOGDANOVICH, S. YA., GUSEYNOV, CH.S. and SHEVSKIY, A.I.

"Dispersed Composition of Aerosol in Natural Gas Flow Under Various Pressures"

Odessa, 11-ya Vses. Konf. po. Vopr. Ispareniya, Goreniya i Gaz. Dinamiki Dispersn. Sistem, 1972 (11-th All-Union Conference on Problems of Evaporation, Combustion and Gas Dynamics of Dispersion Systems, 1972), 1972, p 19 (from Referativnyy Zhurnal-Mekhanika, 1973, Abstract No 2B1223)

Translation: Results are described of the analysis of experimental data on pressure effects on the process of droplet formation in natural gas. The dispersed composition of droplets at different pressures and flow velocities was measured by K.S. Shifrin optical method. It is shown that V.G. Levich relation between droplet size and flow velocity is true for natural gas, the coefficient of proportionality for this relation is determined and a single curve of droplet distribution in nondimensional form is plotted. Since the droplet size depends on the surface tension of the liquid at its boundary with gas, a test installation was prepared based on the method of maximum gas bubble pressure, 1/2.

USSR

BOGDANOVICH, S. YA., et al., 11-ya Voen. Konf. po Vopr. Isperenlya, Gerontiya i Gid. Dinamiki Dispersn. Sistem, 1972, p 19

variation of surface tension of carbon dioxide condensate in wide range of pressures (1 to 100 atm) was investigated.

It is shown that pressure has a pronounced effect on the surface tension of the condensate ($\sigma = 22.5$ dyn/cm at 1 atm, $\sigma = 13$ dyn/cm at 50 atm), the resulting modul radius of the droplet varies from 150 to 39 mcm respectively.

2/2

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USSR

UDC: 621.396.96:621.391.82

BOGDANOVICH, V. A. and PROKOF'YEV, V. N.

"Ranking Detector of Fluctuating Signals in Noise of Unknown Distribution"

Kiev, Izvestiya VUZ - Radioelektronika, vol. 14, No. 5, 1971, pp 522-526

Abstract: A two-stage rule for noncoherent detection of a radar signal, with binary quantization in the first stage and the accumulation of quantized values in the second, is proposed. The rule is based on the comparison of oscillations received from two adjoining sectors under radar observation for range and angle, i.e., the contrast method, and uses ranks of original observations. Furthermore, it does not require any a priori information concerning the noise distribution and maintains its efficiency in the face of a mixture of nonstationary noise and the signal with any distribution, and is convenient for realization by digital computer techniques. A block diagram of the ranking detector is shown, and curves are given for the losses in the threshold signal/noise ratio as a function of the number of accumulation cycles and for the efficiency of the ranking detector for various signal fluctuation laws.

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USSR

UDC 621.391.2

BOGDANOVICH, V. A., PROKOF'YEV, V. N.

"Optimum Recognition of Two-Frequency Radar Signals With 'Interfering' Parameters"

Moscow, Radiotekhnika i Elektronika, vol 16, No 12, Dec 71, pp 2193-2196

Abstract: The theory of unbiased resolving rules is used as a basis for determining the optimum rule for recognition of two-frequency radar signals. It is assumed that the signals are reflected from two targets (objects) with different geometric dimensions, and that the a priori data on both the signal parameters and the noise level are incomplete. The structure of the device which realizes this rule is also determined. The rule is based on differences ("contrasts") in the variances and coefficients of mutual correlation of the pulses in the reflected "packets". The resultant recognition rule has properties which are important from the standpoint of realization in automatic systems: 1) it ensures an invariable probability of an error of the first kind for any actual values of signal parameters and any noise level without the need for adjustment during

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USSR

BOGDANOVICH, V. A., PROKOF'YEV, V. N., Radiotekhnika i Elektronika, vol 16,
No 12, Dec 71, pp 2193-2198

operation; 2) it ensures maximum probability of a correct solution for
any actual values of signal parameters in any noise level in the sense
of uniformly maximum power. One figure, bibliography of eight titles.

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USSR

UDC 621.391.8

BOGDANOVICH, V. A.

"Detecting Coherent Pulse Packets in Noise of Unknown Power"

Kiev, Izvestiya VUZ--Radioelektronika, vol. 14, No. 7, 1971, pp 762-768

Abstract: In detecting signals in noise of unknown power, the probability of false alarms must be stabilized against possible changes in the noise level. This article considers a rule for detecting coherent pulse packets of unknown initial phase in normal noise where the false alarm probability is independent of the noise level and the correct detection probability is invariant with respect to the initial phase. The similarity principle is used to eliminate the effect of unwanted parameters on the false alarm probability. A detection algorithm is derived, and the block diagram of a receiver for realizing the algorithm is given. Curves are plotted for the detection of "amicably" fluctuating pulse packets, from which the effectiveness of the detection and the losses in the threshold signal/noise ratio caused by the noise power can be determined. The curves show that the losses drop quickly with increasing numbers of pulses in the packet, and are less than 2 dB for 10 pulses.

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Radar

USSR

UDC 621.381.8

BOGDANOVICH, V. A., PROKOF'YEV, V. N.

"Order Detector of Fluctuating Signals in Noise of Unknown Level"

Kiev, Izvestiya Vysshikh Uchebnykh Zavedeniy -- Radioelektronika, Vol XIV, No 2, 1971, pp 188-191

Abstract: This article contains a study of the construction of an order detector of radar signals in noise of unknown level. The rank criterion of incoherent detection of a fluctuating radar signal against a background of noise of unknown level is determined. This criterion is based on comparison of the oscillations received from two adjacent elementary resolution sections of the radar with respect to range, and it uses the ranks of the initial observations for arbitrary fixed sampling. It does not require a priori information about the signal and noise level and is optimal for small signal/noise ratios. The important properties of the decision rule, in particular, constancy of false alarm for any noise intensity are noted. It is emphasized that when working under actual conditions a detector based on the potential criterion of the probability ratio can give results which are far from potentially optimal as a result of the fact that the noise level is unknown and does not coincide with the calculated value. In this sense the rank detector

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USSR

BOGDANOVICH, V. A., et al., Izvestiya Vysshikh Uchebnykh Zavedeniy -- Radio-
elektronika, Vol XIV, No 2, 1971, pp 188-191

is preferable since it does not require a priori knowledge of the noise level and insures invariant probability of false alarm without any threshold tuning and the greatest operating efficiency for any noise and signal level.

2/2

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USSR

UDC: 621.391.2:621.376.4

BOGDANOVICH, V. A.

"Invariant Rule for Signal Reception With Single Phase-Difference Modulation"

Moscow, Radiotekhnika i elektronika, No. 11, 1970, pp 2255-2258

Abstract: The rule developed by this article is applicable to the case of sufficiently slow signal fading in a communication channel, where a reference coherent oscillation cannot be formed due to the inertia of the formation system. The amplitude and initial phase of the signal are considered random quantities, but are invariant in the course of two neighboring samples. It is shown that of all reception methods in which the error probability is independent of the signal's initial phase and the oscillation level, the correlation method is most efficient for a fixed signal amplitude as well as a fluctuating signal varying according to any law. For unequal a priori probabilities of the transmitted signals, the rule obtained has the least probability of error in Rayleigh signal fluctuations and a sufficiently high signal-to-noise ratio.

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USSR

UDC 621.391.8

BOGDANOVICH, V. A. and PROFOK'YEV, V. N.

"Optimal Detector of Signals in Unknown Noise"

Kiev, Izvestiya VUZov SSSR-Radioelektronika, Vol 13, No 2, 1970, pp 128-130

Abstract: This short article offers the functional system for a coherent detector of radar signals of unknown amplitude in additive normal noise of unknown power. The detector operates in accordance with the uniformly maximum power undisplaced detection rule and does not require a priori information concerning the noise level or the signal amplitude. The following assumptions are made: the signal reflected from the target is a periodic sequence of pulses with unknown amplitudes; the noise is additive and normal, with unknown dispersion; the received oscillations are given coherent processing. The optimum detector has the following important characteristics: it is independent of the a priori unknown parameters of the amplitude and dispersion; it guarantees that the false alarm probability will be no higher than a specified value; it is most efficient for any actual amplitude and dispersion. A block diagram of the detector system is given.

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1/2 032 UNCLASSIFIED PROCESSING DATE--02OCT70
TITLE--OPTIMAL DETECTOR OF SIGNALS IN UNKNOWN NOISE -U-
AUTHOR--(02)-BOGDANOVICH, V.A., PROFOKYEV, V.N. *B*
COUNTRY OF INFO--USSR
SOURCE--KIFV, IZVESTIYA VUZOV SSSR-RADIOELEKTRONIKA, VOL 13, NO 2, 1970,
PP 128-130
DATE PUBLISHED-----70

SUBJECT AREAS--NAVIGATION
TOPIC TAGS--RADAR SIGNAL, NOISE ANALYZER, DETECTION SYSTEM

CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1991/0352 STEP NO--UR/0452/70/013/002/0128/0130
CIRC ACCESSION NO--AP0110240
UNCLASSIFIED

2/2 032

UNCLASSIFIED

PROCESSING DATE--02OCT70

CIRC ACCESSION NO--AP0110240

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THIS SHORT ARTICLE OFFERS THE FUNCTIONAL SYSTEM FOR A COHERENT DETECTOR OF RADAR SIGNALS OF UNKNOWN AMPLITUDE IN ADDITIVE NORMAL NOISE OF UNKNOWN POWER. THE DETECTOR OPERATES IN ACCORDANCE WITH THE UNIFORMLY MAXIMUM POWER UNDISPLACED DETECTION RULE AND DOES NOT REQUIRE A PRIORI INFORMATION CONCERNING THE NOISE LEVEL OR THE SIGNAL AMPLITUDE. THE FOLLOWING ASSUMPTIONS ARE MADE: THE SIGNAL REFLECTED FROM THE TARGET IS A PERIODIC SEQUENCE OF PULSES WITH UNKNOWN AMPLITUDES; THE NOISE IS ADDITIVE AND NORMAL, WITH UNKNOWN DISPERSION; THE RECEIVED OSCILLATIONS ARE GIVEN COHERENT PROCESSING. THE OPTIMUM DETECTOR HAS THE FOLLOWING IMPORTANT CHARACTERISTICS: IT IS INDEPENDENT OF THE PRIORI UNKNOWN PARAMETERS OF THE AMPLITUDE AND DISPERSION; IT GUARANTEES THAT THE FALSE ALARM PROBABILITY WILL BE NO HIGHER THAN A SPECIFIED VALUE; IT IS MOST EFFICIENT FOR ANY ACTUAL AMPLITUDE AND DISPERSION. A BLOCK DIAGRAM OF THE DETECTOR SYSTEM IS GIVEN.

UNCLASSIFIED

USSR

UDC 621.385.4

BOGDANOVICH, V.B., KAGANOVICH, E.B., SVECHNIKOV, S.V.

"Photoresistors On A Basis Of CdS Films Chemically Precipitated From An Aqueous Solution"

Poluprovodn. tekhn. i mikroelektronika. Resp. Mezhd. sb. (Semiconductor Technology And Microelectronics. Republic Interdepartmental Collection), 1972, Issue 8, pp 91-94 (from RZh:Elektronika i yeye primeneniye, No 11, Nov 1972, Abstract No 11B319)

Translation: Raster [rastrovyy] and coordinated--sensitive photoresistors are developed on the basis of highly photosensitive CdS films. Their parameters and characteristics are presented. It is shown that according to a number of parameters the photoresistors produced surpass the industrial and favorably differ from the former by the technological reproducibility of the parameters, the low cost, and the simple production technology. 6 ill. 1 tab. 3 ref. Summary.

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USSR

UDC 577.4

BOGDANOVICH, V. I.

"Simulation of Systems by K-Valued Logical Functions"

V sb. Prom. kibernetika (Industrial Cybernetics -- collection of works), Kiev, 1971, pp 115-120 (from RZh-Kibernetika, No 9, Sep 72, Abstract No 9V396)

No abstract

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Acc. Nr:

BOGDAR M.G.

Ref. Code:

AA0108688

Abstracting Service:

UR 0482

Soviet Inventions Illustrated, Section II Electrical, Derwent, 3-74

243238 X-RAYING AN ARTICLE WITH A GAMMA DEFECTSCOPE

involves the storing and moving of a radioactive prepn. ampoule to a required position and the use of a shielded container with a spiral channel along which moves the holder. The device has a flexible element, one end of which is connected to the ampoule and to a cylindrical holder with a recess for placing the ampoule in a storing position.

Briefly the lay out of the device consists of a shielded container formed by two wolfram flanges 1 and 2. In the lower flange 1 is bored a hole through which passes a shaft 3 and movable holder 4. Tangentially from the hole in the cylinder are the channels, which have continuation in shield 5 to the holder 4 are joined ampoules 7 on flat springs 6. With a

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remote control is switched on drive 8, which turns holder 4 moving the ampoule with it. On reaching the channels the flat springs straighten out they move the ampoule beyond the shielded container into spherical translucense. By turning the holder in reverse it brings the back into storage.

1 7.67 as 1201484/25-28, BOGRAD, M.F. Building and Special Structural Res Inst. (24.9.69) Bul. 16/5.5.69. Class 42k, Int. Cl. G 01n.

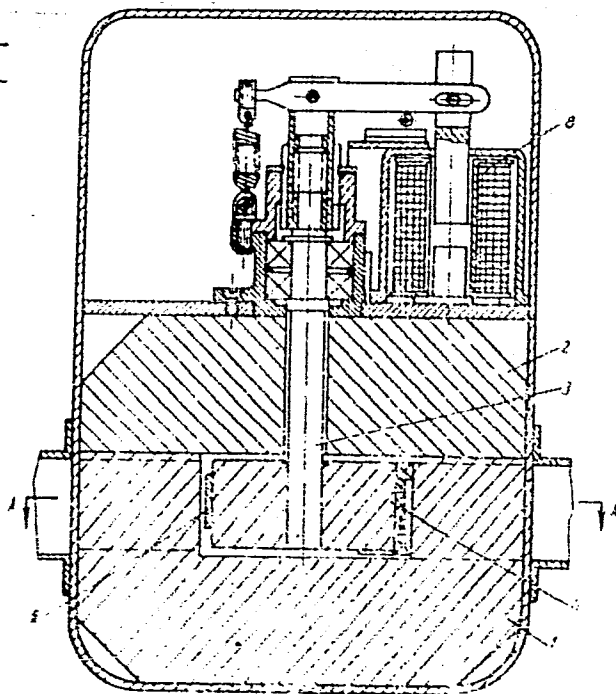
AUTHOR: Bogdar, M. G.

Spetsial'noye Konstruktorskoye Byuro Vsesoyuznogo Nauchno-Issledovatel'-skogo Instituta po Montazhnym i Spetsial'nym Stroitel'nym Rabotam

2/3

19900409

AA0108688



19900410

BOGDASHEVSKIY, R. B.

space physiology

So: TPAS 55100

4 FEB 72

UDC 612.76:613.693:629.78

COORDINATION STRUCTURE OF WALKING OF SOYUZ-9 CREW MEMBERS BEFORE AND AFTER FLIGHT

Article by R. B. Bogdashevskiy, A. V. Yermolaev and L. A. Kolesov; Moscow, Kosmicheskaya Biologiya i Meditsina, Vol 5, No 6, 1971, submitted for publication 18 November 1970, pp 48-52.

Article by R. B. Bogdashevskiy, A. V. Yermolaev and L. A. Kolesov; Moscow, Kosmicheskaya Biologiya i Meditsina, Vol 5, No 6, 1971, submitted for publication 18 November 1970, pp 48-52.

COLEEN

Abstract: The cyclogrammetric method was used in studying the structure of walking of Soyuz-9 crew members after recovery. It is shown that the long-duration flight induced rearrangements in the walking structure which involved changes in the intensity and time of controlling impulses sent to the periphery, increases in the number of movement corrections, and other kinematic and dynamic peculiarities. During early readaptation one can discriminate two stages: a stage of a "sampling" gait, in which the changes are seen visually, and a stage of an "impact" gait in which the foot evidently impacts the support normally but the cyclogrammetric analysis reveals abnormalities in motor skills.

Some Soviet and American cosmonauts have exhibited an unstable gait during the first hours after landing, but no special study of gait peculiarities has been made. However, this is of both theoretical and practical importance because on the basis of the laws of structuring of gait and other locomotions during the readaptation period one can introduce corrections into the formulation of a rational regime for the motor activity of cosmonauts.

The biomechanics of gait in the cosmonauts A. Nikolayev and V. Sevast'yanov was investigated early after landing (up to 5 days). The first period after landing, characterized by distinct changes in gait, lasted about 2 days. Gait was accompanied by clearly expressed autonomic reactions (facial redness, pulse quickening). During walking the cosmonauts spread their legs far apart, the torso was shifted in the direction of the supporting legs, and they deviated from a straight trajectory. They frequently

1/2 025 UNCLASSIFIED PROCESSING DATE--30OCT70
TITLE--EVALUATING THE EFFECTIVENESS OF ANTIOXIDANT ADDITIVES TO GASOLINES
-U-
AUTHOR--(04)-GUREYEV, A.A., BOGERUK, L.G., KUZMINA, N.A., DEMIDENKO, K.A.
COUNTRY OF INFO--USSR
SOURCE--NEFTEPERERAB. NEFTEKHIM. (MOSCOW) 1970, (2), 2-4
DATE PUBLISHED-----70

SUBJECT AREAS--PROPULSION AND FUELS
TOPIC TAGS--GASOLINE, FUEL ADDITIVE, ANTIOXIDANT ADDITIVE, THERMAL
CRACKING, CYCLOHEXENE

CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1996/1520 STEP NO--UR/0318/70/000/002/0002/0004
CIRC ACCESSION NO--AP0118507
UNCLASSIFIED

2/2 025 UNCLASSIFIED PROCESSING DATE--30OCT70
CIRC ACCESSION NO--AP0118507
ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. CYCLOHEXENE (I) WAS USED AS A
STD., INSTEAD OF GASOLINE FOR THERMAL CRACKING, TO DET. THE ANTIOXIDANT
EFFECTIVENESS BY AN OXIDN. TEST AT 100DEGREES. FOR INDUCTION PERIODS OF
SMALLER THAN 400 AND LARGER THAN 400 MIN, THE DIFFERENCES BETWEEN 2
DETNS. WERE SMALLER THAN 15 AND SMALLER THAN 30 MIN, RESP. AFTER THE
DETN., I WAS RECOVERED BY DISTN. AND REUSED.

UNCLASSIFIED

USSR

UDO 621.373.029.7.001.5

LOBOV, G.D., SHYKOV, V.V., BOGETKIN, V.I., DRUGOV, L.V.

"Possible Mechanism Of Discharge Current Change In CO₂ Affected By Laser Radiation"

Radiotekhnika i elektronika, Vol XVII, No 6, June 1972, pp 1246-1251

Abstract: One of the possible mechanisms is considered for change of the discharge current in carbon dioxide gas affected by the radiation of a CO₂ laser. The theoretical results are found in satisfactory agreement with experimental data. In the experiments particular attention was paid to the effect of radiation on the discharge current in CO₂ during irradiation of its cathode region by a fine laser beam. A theoretical and experimental estimation was also made of the efficiency of conversion of a detector of infrared radiation, using a change of discharge current. It is possible that the results obtained in this work can be useful during study of the processes in the gaseous medium of CO₂ amplifiers and generators, and also during use of the change of the discharge current for registering the radiation of a CO₂ laser. The authors thank E.S. Shitsman for participation in the conduct of the experiments. 5 fig. 9 ref. Received by editors, 12 April 1971.

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1/2 017 UNCLASSIFIED PROCESSING DATE--30OCT70
TITLE--BIOLOCATION DIAGNOSIS OF EFFUSIONS IN SEROUS CAVITIES -U-

AUTHOR--(02)-BOGIN, YU.B., BOGDANOV, A.V.

COUNTRY OF INFO--USSR

SOURCE--TERAPEVTICHESKIY ARKHIV, 1970, VOL 42, NR 5, PP 87-91

DATE PUBLISHED-----70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--HEART DISEASE, RESPIRATORY SYSTEM DISEASE, DIAGNOSTIC MEDICINE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1998/0471

STEP NO---UR/0504/70/042/005/0087/0091

CIRC ACCESSION NO--AP0121145

UNCLASSIFIED

2/2 017

UNCLASSIFIED

PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0121145

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE RESULTS OF BIOLOCATION DIAGNOSIS OF EFFUSIONS IN SEROUS CAVITIES IN 159 PATIENTS (ASCITIS IN 53, PERICARDITIS IN 38, PLEURISY IN 74) GIVE GROUND TO CONSIDER THAT ECHOGRAPHIC STUDY MAKES IT POSSIBLE TO STAGE AN ACCURATE DIAGNOSIS OF THE BLOOD ACCUMULATION IN SEROUS CAVITIES AND TO ESTIMATE ITS QUANTITY.

FACILITY: 3-YA KAFEDRA KHIRURGII TSENTRAL'NOGO INSTITUTA USOVERSHENSTVOVANIYA VRACHEY AND LABORATORIYA BIOLOKATSIONNOY DIAGNOSTIKI NA BAZE TSENTRAL'NOY KLINICHESKOY BOL'NITSY MINISTERSTVA PUTEY SOOBSHCHENIYA, MOSCOW.

UNCLASSIFIED

MEDICINE

Diagnostics

USSR

SHUL'TZEV, G. P., Professor, BOGIN, Yu. N., Candidate of Medical Sciences, and ARKHIPOV, N. S., 4th Chair of Therapy, Central Institute for the Advanced Training of Physicians, and Central Clinical Hospital No. 1, Ministry of Railways, USSR, Moscow

"Ultrasound Diagnosis of Some Diseases of the Kidneys"

Moscow, Klinicheskaya Meditsina, Vol 48, No 7, Jul 70, pp 3-6

Abstract: The Soviet UZD-5 ultrasonic apparatus which permits examination of tissues to a depth of 15cm., was used in the diagnosis of certain kidney diseases. Single-lead and double-lead echo-probes were placed between the 12th thoracic and 3d lumbar vertebrae, 4-5 cm to the side of the midline. The echorenograms obtained were used to detect various diseases of the kidneys in 400 patients. The characteristic pictures obtained by echograms were used in localizing kidney stones, contour deformities, hydronephroses, tumors, loci of degeneration, etc. The patients subjected to ultrasonic examination experienced no discomfort, and there were no undesirable clinical manifestations. Further studies are needed to establish diagnostic criteria for healthy and infected tissue on the basis of frequency, intensity, and rate of ultrasonic diffusion in tissues and organs under normal and pathological conditions.

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1/2 014 UNCLASSIFIED PROCESSING DATE--04DEC70
TITLE--ULTRASOUND DIAGNOSIS OF PNEUMONIA -U-
AUTHOR--(05)-BOGIN, YU.N., MUTINA, YE.S., BOGDANOV, A.V., SHIRSHOVA, T.N.,
BEDUKHINA, ~~E.I.~~ *B*
COUNTRY OF INFO--USSR
SOURCE--KLINICHESKAYA MEDITSINA, 1970, VOL 48, NR 6, PP 123-138
DATE PUBLISHED-----70
SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--PNEUMONIA, ULTRASOUND, DIAGNOSTIC MEDICINE
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--3005/1474 STEP NO--UR/0497/70/048/006/0123/0128
CIRC ACCESSION NO--AP0133410
UNCLASSIFIED

2/2 014

UNCLASSIFIED

PROCESSING DATE--04DEC70

CIRC ACCESSION NO--AP0133410

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE AUTHORS EVALUATED THE DIAGNOSTIC POSSIBILITIES OF THE BIOLOCATION TECHNIQUE IN ACUTE AND CHRONIC PNEUMONIA. THERE WERE 31 PATIENTS WITH ACUTE PNEUMONIA AND 55 WITH CHRONIC. PATIENTS WITH ACUTE PNEUMONIA ON THE ECHOGRAM SHOW HETEROGENOUS FOCI OF INDURATION OF THE PULMONARY TISSU WHICH DISAPPEAR UPON RECOVERY. IF PNEUMONIA IS COMPLICATED BY ACUTE PLEURISY ON THE ECHOGRAM THE LAYER OF FLUID IS REFLECTED IN THE FORM OF NONINTENSIVE HOMOGENOUS SHADOW. THE PNEUMONIC FOCUS IS WELL SEEN BEYOND THE FLUID LAYER. AN EXACERBATION OF CHRONIC PNEUMONIA IS ACCOMPANIED BY THE APPEARANCE OF HETEROGENOUS FOCI OF PULMONARY TISSUE INDURATION.
FACILITY: IV KAFEDRA TERAPII I II KAFEDRA KHIRURGII TSENTRAL'NOGO INSTITUTA USOVERSHENSTVOVANIYA VRACHEY, MOSKVA, BIOLOKATSIONNAYA LABORATORIYA NA BAZE TSENTRAL'NOY KLINICHESKOY BOL'NITSY MINISTERSTVA PUT'EY S00BSHCENIYA, MOSKVA.

UNCLASSIFIED

USSR

UDC: 669.245:543.25

BOGINA, N. KH. and LASHKO, N. F.

"Electrochemical Conditions for the Separation of the γ' -Phase From High-Temperature Nickel Alloys"

Moscow, Zavodskaya laboratoriya, Vol 37, No 10, 1971, pp 1172-1175

Abstract: In the practice of phase analyses of nickel and iron-nickel-chrome alloys, use is made of methods of isolating the γ' -phase from electrolytes with oxygen-containing anions (NO_3^- , SO_4^{2-} , PO_4^{3-}) using current density control within 0.03-0.10 amp/cm. It is assumed that these conditions afford quantitative isolation of the γ' -phase. The objective of this study was to substantiate such conditions of electrolysis. The elements and their contents in the γ - and γ' -phases of the $\gamma+\gamma'$ -alloys under study are cited. The anodic polarization curves of the test alloys are shown and data on isolated γ' -phases given. It is shown that quantitative isolation of the γ -phase from chromium-containing alloys EI437B, EI617, and ZnS6 is achieved from electrolytes with oxygen-containing

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USSR

BOGINA, N. KH., et al, Zavodskaya laboratoriya, Vol 37, no 10, 1971, pp 1172-1175

ions under potentiostatic and galvanostatic conditions. The quantitative isolation of the γ' -phase of nickel-base alloys with minute contents of chromium or without it necessitates the use of electrolytes with fairly strong oxidizing agents. (5 illustrations, 1 table, 3 bibliographic references).

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USSR

UDC 612.017.1.014.426

BOGINICH, L. F., Tomsk Medical Institute

"The Effect of an Alternating Magnetic Field on Factors of Species Humoral Immunity"

Moscow, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 11, 1971, p 145

Abstract: A 2-week exposure of rats to an alternating magnetic field (200 oe, 50 hz) caused fluctuations in the concentration of immune factors in the serum. The complement titer increased in 6 hrs of exposure, decreased below control in 24 hrs, rose again above control in 3 days, fell below control in 7 days, and returned to normal in 14 days. The lysozyme titer fluctuated in the opposite direction, forming almost a mirror image of the complement curve. In the properdine titer, the first change occurred in 12 hrs. It was an upshift which was followed by alternating returns to normal and rises above normal, with the last value on the 14th day being elevated. It is concluded that since an alternating magnetic field can induce changes even in phylogenetically stable factors, it is bound to alter the immunological reactivity of the body.

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USSR

UDC 577.3

VASIL'YEV, N. V., SHTERNBERG, I. B., and ROGINICH, L. F.

"The Magnetic Field, Infection, and Immunity"

Vliyaniye Magnitnykh Poley na Biologicheskiye Ob'yekty, pp 108-123

Abstract: This article presents the results of research conducted in various laboratories, above all the projects of the authors themselves, on the question of the effect of a magnetic field on the organism's immunobiological reactivity. It is demonstrated that a magnetic field is a physical factor which is unquestionably active in relation to the mechanisms of immunobiological reactivity in both its nonspecific and specific elements. The effect of a magnetic field on the formation of antibodies has aspects which are similar to the effect of ionizing radiation. It is established that the magnetic field by itself, without immunization, is capable of arousing in lymphoid tissue a set of changes which are similar to immunomorphological ones. The possibility is not excluded that this circumstance is related to the stressor action of both immunization and a magnetic field. The basic directions for work in this area are laid out.

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USSR

UDC 612.42.014.426

VASIL'YEV, N. V., BOGINICH, I. F., and SHILYAYEVA, G. G., Chair of Microbiology and Central Scientific Research Laboratory, Tomsk Medical Institute

"Comparison of the Reaction of Lymph Tissue to Antigenic and Nonantigenic (Alternating Magnetic Field) Stimulation"

Moscow, Arkhiv Patologii, No 9, 1971, pp 47-51

Abstract: Exposure of rats to an alternating magnetic field (200 oersteds, frequency of 50 Hz) induced an immunomorphological response of the thymus, spleen, and lymph nodes comparable to that observed after antigenic stimulation - desquamative sinusitis, stimulation of the reticular syncytium, proliferation of plasma cells, and hyperplasia of the spleen and lymph nodes. Similar but milder shifts were observed in control animals kept in tight containers like the experimental rats, suggesting that they were the result of stress (enforced immobilization). The similarity of the reaction of lymph tissue to antigenic and nonantigenic factors indicates that it is a form of Selye's adaptation syndrome.

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USSR

UDC 612.42.014.426

BOGINICH, L. F., VASIL'YEV, N. V., DARCHUK, V. A., and MELIK-GAYKAZYAN, Ye. V.,
Chair of Microbiology, Tomsk Medical Institute

"Complex Reaction of Lymphoid Tissue to the Effect of an Alternating Magnetic Field"

Moscow, Patologicheskaya Fiziologiya i Eksperimental'naya Terapiya, Vol 14,
No 4, Jul/Aug 70, pp 73-74

Abstract: A study was made of cytological shifts in the spleen, thymus, and lymph nodes of rats exposed to an alternating magnetic field over an extended period of time. The reaction of the lymphoid tissue occurred in two stages. The first stage, lasting less than a day, consisted of a decrease in the number of lymphoblasts and proplasmocytes and an increase in the number of medium-size lymphocytes. The second stage developed by the 3rd day and was marked by an increase in the number of proplasmocytes and medium-size lymphocytes in all of the organs studied and by an increase in the number of medium-size lymphocytes in the thymus and lymph nodes. The resemblance of the dynamics of proplasmocytes with that of cells of the plasmatic series in the early stages of immunogenesis (the inductive phase of antibody formation) suggests that nonspecific mechanisms play an important part in the development of immunomorphological shifts.
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USSR

UDC 612.112.3.014.426

BOGINICH, L. F., Tomsk Medical Institute, Siberian Physico-Technical Institute, and Institute of Nuclear Physics, Tomsk Polytechnic Institute, Tomsk

"Effect of an Alternating Magnetic Field on Phagocytosis"

Moscow, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 4, Apr 71, pp 141-142

Abstract: The effects of prolonged action of an alternating industrial frequency (20 Oe, 50 cycles) magnetic field on the dynamics of phagocytic activity of leukocytes were studied. Experiments were conducted on 128 rats subdivided into an experimental and control group. The experimental animals were placed in a plexiglas container held between the poles of a magnet generating the field, while control rats were kept under the same conditions, but not subjected to the action of the field. The same number of animals from each group was sacrificed 6, 12, 24, and 3, 5, 7, and 14 days after the beginning of the experiment, so that heart blood could be investigated. The phagocytic activity of leukocytes (neutrophils) was determined according to Berman and Slavskaya (1958). A suspension of a 24-hr culture of *Listeria monocytogenes* (2 billion cells per ml) served as the object of phagocytosis. All 100 leukocytes counted were generally active. For this reason, only the absorptive and re-
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USSR

BOGINICH, L. F., Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 4, Apr 71, pp 141-142

sorptive ("digesting") capacities of the number or index. Three stages were observed in the course of changes in the absorptive capacity of leukocytes: that of stimulation (up to the 48 th hour), that of inhibition (including the 3rd day), and that of adaptation (beginning approximately with the 5th day). In the course of changes in the resorptive capacity, the stage of inhibition was absent: stimulation was observed up to and including the 5th day, while beginning with the 7th day the adaptation stage followed that of stimulation.

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USSR

UDC 624.07:534.1

PISARENKO, G. S., SHEVCHUK, A. D., BOGINICH, O. Ye., SHEMEGAN, A. A.

"On the Problem of Studying Energy Scattering in a Material Under High-Frequency Oscillations"

V sb. Rasseyaniye energii pri kolebaniyakh mekh. sistem (Energy Scattering Under Oscillations of Mechanical Systems -- Collection of Works), Kiev, "Nauk. dumka", 1972, pp 41-50 (from RZh-Mekhanika, No 3, Mar 73, Abstract No 3V265)

Translation: A computational-experimental method is presented for determining the decrement in damping in a material under high-frequency vibrations. The basic idea of the method is that in the test process the resonance frequency shift of the sample is measured for different vibration amplitudes. The coefficients of the approximating polynomial showing the damping decrement as a function of stresses are determined from the resulting resonance skeleton curve. A sample calculation is given. 6 ref. I. Sh. Rakhmatulin.

1/1

1/2 019 UNCLASSIFIED PROCESSING DATE---13NOV70
TITLE--BRIDGE AND METALLURGICAL CRANES -U-
AUTHOR--(03)-BOGINDKIY, K.S., ZOTOV, F.S., NIKOLAYEVSKIY, G.M.
COUNTRY OF INFO--USSR *B*
SOURCE--MOSCOW, MASHINGSTROYENIYE, 1970, 299 PP
DATE PUBLISHED-----70
SUBJECT AREAS--MECH., IND., CIVIL AND MARINE ENGR, MATERIALS
TOPIC TAGS--CRANE, CALCULATION, METAL STRESS, BRIDGE, METALLURGICAL
MACHINERY, STRUCTURAL STEEL, MONOGRAPH, BIBLIOGRAPHY
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1995/0314 STEP NO--UR/0000/70/000/000/0001/0299
CIRC ACCESSION NO--AM0116005
UNCLASSIFIED

2/2 019

UNCLASSIFIED

PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AM0116005

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. TABLE OF CONTENTS: PREFACE 3.
CHAPTER I TECHNICAL SPECIFICATIONS FOR CRANES 5. II BASIC DATA ON
CALCULATION OF CRANES 20. III DESIGNS AND CALCULATION
CHARACTERISTICS OF CRANES 60. IV METAL STRUCTURES OF CRANES 199.
V UNIFICATION OF CRANES 251. BIBLIOGRAPHY 298. THE BOOK CONTAINS
DESCRIPTIONS AND CALCULATIONS OF ELECTRICAL ALL PURPOSE BRIDGE CRANES OF
A HIGH LOAD CAPACITY AS WELL AS METALLURGICAL CRANES. THE BOOK IS
BASED MAINLY ON CRANE CONSTRUCTION EXPERIENCE OF THE KRASNOYARSK FACTORY
"SIBTYAZHMASH". IT CONTAINS ALSO DATA ON CRANES MANUFACTURED BY THE
NOVO-KRAMATORSK MACHINE CONSTRUCTING PLANT IM. V. I. LENINA, THE
LENINGRAD PLANT OF HOISTING AND CONVEYING EQUIPMENT IM. S. M. KIROVA,
AND CERTAIN FOREIGN ENTERPRISES. THE BOOK WAS WRITTEN FOR ENGINEERING
TECHNICAL PERSONNEL CONNECTED WITH DESIGN, MANUFACTURE AND OPERATION OF
BRIDGE AND METALLURGICAL CRANES. IT CAN BE USEFUL ALSO TO COLLEGE AND
TECHNICUM STUDENTS.

UNCLASSIFIED

USSR

UDC 539.3:534.1

PISARENKO, G. S., BOGINICH, O. Ye., SHEMEGAN, A. A.

"Calculation of Energy Scattering in Transverse Vibrations of Square Metal Plates With Damping Coatings and Loaded With a Concentrated Load"

V sb. Rasseyaniye energii pri kolebaniyakh mekh. sistem (Energy Scattering in the Vibrations of Mechanical Systems -- Collection of Works), Kiev, "Nauk. dumka", 1972, pp 20-38 (from RZh-Mekhanika, No 3, Mar 73, Abstract No 3V232)

Translation: An equation is obtained for the forced vibrations of a square plate with damping coatings loaded by a concentrated load and induced by a harmonic force considering the nonlinearity of scattering of energy in the coating material. This equation describes vibrations of an equivalent single-layer plate with a load where the scattering of energy in the material is subject to empirically established relationships for a plate with damping coatings. By expanding the solution in terms of powers of the small parameter and using as a null approximation the solution of the problem of oscillations of hinge-supported plates with a load, the authors obtain first approximation formulas for the construction of an amplitude resonance curve. Calculations

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USSR

PISARENKO, G. S., et al, Rasseyaniye energii pri kolebaniyakh mekh. sistem, Kiev, "Nauk. dumka", 1972, pp 20-38

are given for a square plate (of D16ATV aluminum alloy) with a load in the center coated with textovinite. The calculated results are compared with experiment. 6 ref. Yu. G. Balakirev.

2/2

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USSR

UDC: 620.178.311.6

PISARENKO, G. S., BOGINICHO, Ye., Kiev

"Consideration of Energy Dissipation of Cyclicly Deformed Material Under Conditions of Planar Stressed State As Applicable to Transverse Oscillations of Plates"

Kiev, Problemy Prochnosti, No 9, 1970, pp 3-13

Abstract: In earlier works, the oscillations of mechanical systems with distributed parameters involving a planar stressed state have been performed by considering energy losses of the cyclicly deformed material on the basis of the principle of superposition as a function of the linear deformations in the direction of the principal stresses. Although this is a logical and simple method of calculation, the accuracy requires confirmation by performance of additional theoretical studies and calculations. These calculations are performed, illustrating that in practical calculations of oscillation of elastic systems considering energy dissipation in the material, use of the method based on the principle of superposition results in insignificant inaccuracies.

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172 007 UNCLASSIFIED PROCESSING DATE--18SEP70
TITLE--ON THE AGE OF ULTRABASIC INTRUSIONS OF THE WEST SAYAN AND TUVA -U-
AUTHOR--(02)-SHCHEGLOV, A.P., BOGNIBOVA, R.T.
COUNTRY OF INFO--USSR *B*
SOURCE--GEOLOGIYA I GEOfIZIKA, 1970, NR 2, PP 127-132
DATE PUBLISHED-----70

SUBJECT AREAS--EARTH SCIENCES AND OCEANOGRAPHY
TOPIC TAGS--EARTH CRUST AGE, ROCK, STRUCTURAL GEOLOGY

CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1986/1230 STEP NO--UR/0210/70/000/002/0127/0132
CIRC ACCESSION NO--AP0103118
UNCLASSIFIED

2/2 007

UNCLASSIFIED

PROCESSING DATE--18SEP70

CIRC ACCESSION NO--AP0103118

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. RECENT DATA ON THE STRUCTURE OF MIDDLE CAMBRIAN IN TUVA, NEAR SHAGONAR MOUNTAIN ARE LISTED IN THE PAPER. THE AGE OF ULTRABASIC INTRUSIONS IS REVISED. THE CLOSE RELATIONSHIP OF ULTRABASIC ROCKS WITH SEDIMENTS OF LOWER CAMBRIAN ALTYNBULAK ROCK SERIES AND THE PRESENCE OF ULTRABASIC ROCK PEBBLES IN BASAL CONGLOMERATES OF KARABULUN SUITE OF MIDDLE CAMBRIAN TESTIFY THE LOWER CAMBRIAN AGE OF ULTRABASIC INTRUSIONS.

UNCLASSIFIED

1/2 007 UNCLASSIFIED PROCESSING DATE--18SEP70
TITLE--ON THE AGE OF ULTRABASIC INTRUSIONS OF THE WEST SAYAN AND TUVA -U-
AUTHOR--(02)-SHCHEGLOV, A.P., ~~BOGNIBOVA, R.T.~~
COUNTRY OF INFO--USSR
SOURCE--GEOLOGIYA I GEOfIZIKA, 1970, NR 2, PP 127-132
DATE PUBLISHED-----70
SUBJECT AREAS--EARTH SCIENCES AND OCEANOGRAPHY
TOPIC TAGS--EARTH CRUST AGE, ROCK, STRUCTURAL GEOLOGY
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAme--1986/1230 STEP NO--UR/0210/70/000/002/0127/0132
CIRC ACCESSION NO--AP0103118
UNCLASSIFIED

2/2 007

UNCLASSIFIED

PROCESSING DATE--18SEP70

CIRC ACCESSION NO--AP0103118

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. RECENT DATA ON THE STRUCTURE OF MIDDLE CAMBRIAN IN TUVA, NEAR SHAGONAR MOUNTAIN ARE LISTED IN THE PAPER. THE AGE OF ULTRABASIC INTRUSIONS IS REVISED. THE CLOSE RELATIONSHIP OF ULTRABASIC ROCKS WITH SEDIMENTS OF LOWER CAMBRIAN ALTYNBULAK ROCK SERIES AND THE PRESENCE OF ULTRABASIC ROCK PEBBLES IN BASAL CONGLOMERATES OF KARABULUN SUITE OF MIDDLE CAMBRIAN TESTIFY THE LOWER CAMBRIAN AGE OF ULTRABASIC INTRUSIONS.

UNCLASSIFIED

1/2 011 UNCLASSIFIED PROCESSING DATE--27NOV70
TITLE--ETHYL VINYL ETHER -U-
AUTHOR--(03)-GUREVICH, V.R., BOGOD, I.A., MEZHLUMYAN, L.YE.
COUNTRY OF INFO--USSR
SOURCE--U.S.S.R. 263,594
REFERENCE--OTKRYTIYA, IZOBRET., PROM. OBRAZTSY, TOVARNYE ZNAKI 1970,
DATE PUBLISHED--10FEB70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--ETHYL ETHER, VINYL COMPOUND, CHEMICAL PATENT, ETHANOL,
CHEMICAL SYNTHESIS
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3006/1593 STEP NO--UR/0482/70/000/000/0000/0000
CIRC ACCESSION NO--AA0135234
UNCLASSIFIED

2/2 011

UNCLASSIFIED

PROCESSING DATE--27NOV70

CIRC ACCESSION NO--AA0135234

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. ETHYL VINYL ETHER IS PREPD. BY
HEATING ETOH AT 150-350DEGREES IN THE PRESENCE OF A CATALYST.

UNCLASSIFIED

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006

UNCLASSIFIED

PROCESSING DATE--20NOV70

TITLE--SIALCOGLYCOLIPIDS OF THE STARFISH DENTOLASTERIAS NIPON. STRUCTURE OF
THE OLIGOSACCHARIDE CHAIN -U-

AUTHOR--(04)-KECHEIKOV, N.K., ZHUKOVA, I.G., SMIRNOVA, G.P., BUGDANOVSKAYA,
T.A.

CCOUNTRY OF INFO--USSR

SOURCE--DOKL. AKAD. NAUK SSSR 1970, 191(2), 358-61, CHEM

DATE PUBLISHED-----70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--STARFISH, LIPID, FRACTIONATION, CHROMATOGRAPHIC SEPARATION,
SILICA GEL

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3003/1489

STEP NO--UR/0020/70/191/002/0358/0361

CIRC ACCESSION NO--AT0130419

UNCLASSIFIED

2/2 006

UNCLASSIFIED

PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AT0130418

ABSTRACT/EXTRACT--(U) GP-C- ABSTRACT. CHROMATOGRAPHY ON SILICA GEL AND ACID HYDROLYSIS WERE USED ALONG WITH METHANOLYSIS AND METHYLATION WITH MEL TO SHOW THAT THE STARFISH YIELDS AT LEAST 3 GLYCOLIPIDS (A, B AND C) WHICH ON METHANOLYSIS YIELD PHYTOSPHINGOSINE AND ME ESTERS OF HIGHER FATTY ACIDS. A AND C CONTAIN ONLY D GLUCOSE WHILE B CONTAINS D GLUCOSE AND D GALACTOSE, IN EQUAL AMTS. PARTIAL STRUCTURES ARE DEFINED.

FACILITY: INST. GIG. KHIM. IM. ZELINSKOGO, MOSCOW, USSR.

UNCLASSIFIED

USSR

UDC: 546.92

AKATOVA, S. P., ~~BOGDANOVSKIY, G. A.~~, and VOVCHENKO, G. D., Department of General Chemistry, Moscow State University

"Adsorption of Methanol on Osmium"

Moscow, Vestnik Moskovskogo Universiteta, Seriya II, Khimiya, no. 6, vol. 11, Nov-Dec 70, pp 744-745

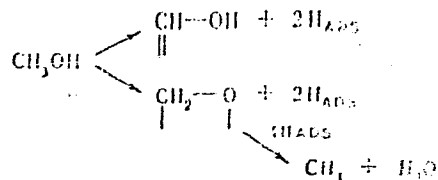
Abstract: The adsorption of methanol on finely crushed osmium powder in a solution of 0.1 N. H_2SO_4 using the direct contact method (as described in an earlier study) has revealed significant differences in the behavior of methanol as compared to that on other platinum metals. On contact of methanol with osmium powder polarized to the value of a potential equaling a two-layer region ($\varphi_r^0 = 0.3$ v), there is no shift in potential toward the negative side for a few hours as it generally occurs on other platinum metals. Based on experimental data, this study suggests that optimum conditions for methanol dehydrogenation on osmium are those at a potential close to 0.2 v where the centers at which dehydrogenation takes place are

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USSR

AKATOVA, S. P., et al, Vestnik Moskovskogo Universiteta, Seriya II, Khimiya, no. 6, vol. 11, Nov-Dec 70, pp 744-745

most released from oxygen and not as yet completely occupied by hydrogen. The absence of potential displacement with methanol introduction ($\phi_r^0=0.2$) in this case may be explained by the fact that the hydrogen appearing due to dehydrogenation is consumed for hydrogenating one of the chemically adsorbed products thus compensating the anticipated shift of ϕ_r toward the cathode. A possible arrangement based on the assumption of self-hydrogenation of a chemically adsorbed aldehyde which arises from the cleavage of two hydrogen atoms on methanol dehydrogenation is proposed:



2/2

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1/2 013 UNCLASSIFIED PROCESSING DATE--13NOV70
TITLE--BEHAVIOUR OF NITROMETHANE AND NITROETHANE ON PLATINUM METALS -U-
AUTHOR-(02)-BOGDANOVSKY, G.A., SHCHEREV, G.I.
COUNTRY OF INFO--USSR *B*
SOURCE--ELEKTROKHIMIYA, MAR, 1970, 6, (3), 318-322
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--NITROMETHANE, PLATINUM ELECTRODE, PALLADIUM, CHEMISORPTION,
ETHANE
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--2000/1987 STEP NO--UR/0364/70/006/003/0318/0322
CIRC ACCESSION NO--AP0125576
UNCLASSIFIED

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018

UNCLASSIFIED

PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0125576

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE INTERACTION OF NITROMETHANE AND NITROETHANE WITH THE SURFACE OF PT, PD, AND OTHER PT GROUP METALS WAS STUDIED, WITH SPECIAL REF. TO THE QUESTION OF THE ADSORPTION OF THE ORGANIC PARTICLES ON THE METAL SURFACE AND THE POTENTIAL DISPLACEMENT CORRESPONDING TO THIS EFFECT. THE BEHAVIOUR OF THE CHEMISORBED SUBSTANCES WAS ANALYSED BY PLOTTING POTENTIOSTATIC AND CHARGING CURVES. AFTER CONTACT WITH NITROETHANE IN PARTICULAR THE SURFACE OF A PT ELECTRODE REMAINED COVERED WITH CHEMISORBED PARTICLES OF VARIOUS COMPOSITIONS AFTER REPEATED WASHINGS. THE MECAHNISMS RESPONSIBLE FOR THESE EFFECTS ARE CONSIDERED.

UNCLASSIFIED

USSR

BOGOD, YU. A., VERKIN, B. I., and KRASOVITSKIY, V. B.

"Special Features of the Electrical Conductivity and Magnetoresistance of Antimony at Low Temperatures"

Moscow, Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, Vol 61, No 1(7), Jul 71, pp 275-286

Abstract: Certain previously discovered properties of the electrical conductivity and magnetoresistance of antimony at low temperatures (2° - 77° K) were studied in detail for samples 0.5-4.0 mm thick. Measurements were made in both stationary and impulse transverse magnetic fields. After briefly describing the conditions of their experiment and the results they obtained, the authors discuss the results in detail under the following three main topics: 1) the mean free path of charge carriers in antimony; 2) the effect of the procedure used to prepare the samples on the kinetic properties of antimony; 3) the mechanisms of scattering of charge carriers in samples of infinite thickness.

The mean free path of the charge carriers as determined from mobility measurements differed by approximately one and a half orders of magnitude from the mean free path as determined from the dimension effect. This

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USSR

BOGOD, YU. A., et al., Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, Vol 61, No 1(7), Jul 71, pp 275-286

difference is thought to be associated with the presence of macroscopic regions of unbalanced distribution of charge carriers in the antimony samples.

Substantial differences were observed in the kinetic properties of samples which had similar geometric dimensions but which had been prepared by different methods, namely chemical etching and electrospark cutting. Apart from the unaccounted for effect of the surface layer, the authors think this may be caused by two factors, which are not mutually exclusive: scattering of twins along the edges and the varying state of the surface. These problems are currently being investigated.

With respect to topic 3) above, the authors are inclined to think that the scattering of charge carriers which occurs in infinitely thick samples of antimony at temperatures in the interval 1.6-20.0 K is due mainly to defects in the crystalline lattice and to phonons.

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USSR

BOGOD, Yu. A., VERKIN, B. I., and KRASOVITSKIY, Vit. B., Physicotechnical Institute of Low Temperatures of the Academy of Sciences UkrSSR

"The Effect of Boundaries on the Electrical and Galvanomagnetic Properties of Sb"

Moscow, Pis'ma v Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, Vol. 12, No. 5, 5 Sep 70, pp 224-228

Abstract: Two single crystals of Sb were studied in the temperature range 1.6-20°K in stationary fields up to 20 koe. The sample dimensions were 4 x 4 x 25 mm³ for Sb V and 1.3 x 1.3 x 22 mm for Sb VI. A rise in the sample temperature and an increase in the transverse dimensions led to qualitatively the same effect: a rise in the anisotropy of the magnetoresistance; the boundaries thus have a definite effect on the anisotropy of magnetostriction below 20°K. The resistance does not increase quadratically down to a temperature of 10°K, which is close to the effective Debye temperature for electron-phonon interaction in Sb. A change in the transverse dimensions of the sample had a considerable effect on quantum effects: the amplitudes of Shubnikov-de Haas oscillations differed by a factor of 2.5. A completely unexpected result was obtained in evaluating the free path length in Sb. On the one hand, the change in the specific resistance of Sb with

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USSR

BOGOD, Yu. A., et al, Pis'ma v Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, Vol. 12, No. 5, 5 Sep 70, pp 224-228

thickness even at 14°K (R_{300K}/R_{14K} is 314 and 250 for Sb V and Sb VI, respectively) indicates that the free path length of the charge carriers at this temperature is of the order of 1 millimeter. On the other hand, according to Oktu and Saunders (Proc. Roy. Soc., 91, 156, 1967), the relaxation time of the charge carriers in Sb at room temperature is weakly anisotropic and is $(1-1.4) \cdot 10^{-13}$ sec. If it is assumed that the variation with temperature of the components of the relaxation time tensor is the same with an accuracy up to an order of magnitude, $\tau \approx 4 \cdot 10^{-11}$ sec at 14°K. Since the Fermi velocity of electrons and holes in Sb is $2 \cdot 10^7$ cm/sec, the path length is equal to the Fermi velocity times the relaxation time: i.e., 10^{-3} cm. It is said to be unlikely that these characteristics of the electro- and magnetoresistance are associated with the classical dimension effect.

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= $\frac{R_{xx}}{R_{yy}}$

USSR

UDC 621.735.32.016.3:621.882.31

MIT'KIN, A. N., Candidate of Technical Sciences, KULIKOV, V. P.,
BOGODIST, V. A., Scientific Research Institute of Technology
of the Motor-Vehicle Industry, Kremenchug Motor-Vehicle Plant

"A New Process for Producing Parts Such as a Connecting Nut by
the Method of Cold Heading"

Moscow, Avtomobil'naya Promyshlennost', No 12, Dec 70, pp 29-31

Abstract: In the USSR and outside of it, a constantly increasing number of parts of complex configuration is being produced by the cold heading method. Among such parts is an air-line connecting nut, which is a typical representative of an entire group of parts that are used for connecting pipelines of various purposes. The process of producing such a connecting nut by the cold heading method is described in detail. The conclusion is drawn that considerable savings of metal are made possible by the employment of this process. 2 tables, 6 figures, 2 bibliographic entries.

1/1

- 45 -

USSR

UDC 621.762.669.018.29

BOGODUKHOV, S. I., BULANOV, V. Ya., and MOKSHANTSEV, G. F.

"Study of Properties of Certain Highly Alloyed Metal Ceramic Compositions Based on Powdered R18 Steel"

Nauka i proiz-vo [Science and Production -- collection of works], No. 4, Chelyabinsk, 1970, pp. 57-59 (Translated from Referativnyy Zhurnal-Metallurgiya, No. 2, 1971, Abstract No. 2 G456 by G. Derkacheva)

Translation: The composition and technology of manufacture of four highly alloyed compositions based on powdered R18 steel filings are presented. The technology of heat treatment and strength properties of these compositions are compared to cast steel. 3 tables; 3 biblio. refs.

1/1

1/2 033 UNCLASSIFIED PROCESSING DATE--30OCT70
TITLE--PROCESSING OF WASTES OF TUNGSTEN, CHROMIUM, VANADIUM, MOLYBDENUM
TOOL STEEL BY MEANS OF POWDER METALLURGY -U-
AUTHOR--(04)--MEYERSON, G.A., KIPARISOV, S.S., BOGODUKHOV, S.I., SMIRNOVA,
M.M.
COUNTRY OF INFO--USSR
SOURCE--POROSH. MET. 1970, 10(2), 38-45
DATE PUBLISHED-----70
SUBJECT AREAS--MATERIALS, MECH., IND., CIVIL AND MARINE ENGR
TOPIC TAGS--TOOL STEEL, TUNGSTEN STEEL, CHROMIUM STEEL, VANADIUM STEEL,
MOLYBDENUM STEEL, MATERIAL CRUSHING, HIGH SPEED STEEL, HOT FORGING,
COMMINUTION, POWDER METALLURGY, ALLOY DESIGNATION, INDUSTRIAL
WASTE/(U)R18 HIGH SPEED STEEL
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1997/0005 STEP NO--UR/0226/70/010/002/0038/0045
CIRC ACCESSION NO--AP0119003
UNCLASSIFIED

2/2 033

UNCLASSIFIED

PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0119003

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE EFFECT WAS STUDIED OF CRUSHING METHODS OF THE CHIPS INTO POWDER AND OF THE PRESSING AND SINTERING CONDITIONS ON THE DENSIFICATION PROCESS DURING SINTERING AND ON THE STRUCTURE AND THE PROPERTIES OF SINTERED STEEL. SINTERED HIGH SPEED W-CR-V-MO. STEEL (R18) POWDERS OF VARIOUS GRAIN SIZE WERE STUDIED. THE EFFECTS OF THE FOLLOWING FACTORS ON DENSIFICATION WERE DETD.; (A) USE OF POWDER WHICH WAS NOT REDUCED AFTER CRUSHING AND CONTG. 0.3-0.4PERCENT O; (B) ADDN. OF SOOT TO THE POWDER IN AN AMT. EQUIV. TO THE O CONTENT; (C) EXTENSIVE DRYING OF H; (D) HIGH PRESSING PRESSURE (UP TO 7-10 TON-CM PRIME2); (E) RAPID HEATING TO 1250DEGREES AND HOLDING THERE FOR 1-2HR. THE COMBINATION OF THESE FACTORS MADE IT POSSIBLE TO PRODUCE BRIQUETS WITH 97-8PERCENT RELATIVE D. A LEDEBURTIC EUTECTIC WAS FORMED DURING SINTERING AT 1200-1250DEGREES. THIS PHENOMENON WAS EXPLAINED BY THE FORMATION, AT THE START OF SINTERING, OF A LIQ. PHASE (WHICH LATER VANISHES) WITH THE IMPURITY OXIDES TAKING PART. SUBSEQUENT HOT FORGING OF THE SINTERED BILLETS ENSURES ZERO POROSITY. THE STRUCTURE OF THESE BILLETS IS SIMILAR TO THE STRUCTURE OF THE BILLETS FROM STEEL R18, BUT HAS SMALLER AND MORE UNIFORMLY DISTRIBUTED CARBIDES, WHICH IS REFLECTED IN THEIR HIGHER HARDNESS, REFRACTORINESS, AND HEAT COND. THE PHYS. MECH. AND CUTTING PROPERTIES OF BLADES MADE FROM SUCH STEEL ARE SOMEWHAT BETTER THAN THOSE FOR BLADES MADE FROM CAST AND PRESSURE WORKED STEEL R18. FACILITY: MOSK. INST. STALI SPLAVOV, MOSCOW, USSR.

UNCLASSIFIED

1/2 017 UNCLASSIFIED PROCESSING DATE--04DEC70
TITLE--RECUPERATIVE BRAKING IN AN ACCUMULATOR TYPE ROLLING STOCK USING
SERIES EXCITED MOTORS -U-
AUTHOR--BOGODUKHOV, YE.S. **B**

COUNTRY OF INFO--USSR

SOURCE--IZV. VUZ. SSSR ELEKTROMEKH. (USSR), NO. 2, P. 165-9 (FEB. 1970)

DATE PUBLISHED----FEB70

SUBJECT AREAS--MECH., IND., CIVIL AND MARINE ENGR, ELECTRONICS AND
ELECTRICAL ENGR.

TOPIC TAGS--THYRISTOR, DIRECT CURRENT, RAILWAY ROLLING STOCK, TRACKED
VEHICLE BRAKE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3008/0314

STEP NO--UR/0144/70/000/002/0165/0169

CIRC ACCESSION NO--AP0137419

UNCLASSIFIED

2/2 017

UNCLASSIFIED

PROCESSING DATE--04DEC70

CIRC ACCESSION NO--AP0137419

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE HIGH POWER PART OF A CIRCUIT BRAKER FOR TRACTION ROLLING STOCK EMPLOYS THYRISTOR INTERRUPTORS OF THE D.C. PATH. WHEN THE POWER THYRISTORS ARE SWITCHED ON, THE POTENTIAL ACROSS THE COMMUTATING CONDENSER, DURING CURRENT CUT OFF IN THE ELEMENTS, ACTUALLY INCREASES, FOLLOWING EXTRA SUPPLY FROM A BLOCKING OSCILLATOR. THE CHARGE RETURNED TO THE ACCUMULATOR BATTERY BY THE MOTOR IS ESTIMATED. THE MINIMUM ROTATION OF THE MOTOR, FOR WHICH THE REGENERATIVE ENERGY IS EXTENDED, IS ABOUT 5 PERCENT OF THE NOMINAL VALUE.

UNCLASSIFIED

1/2 008 UNCLASSIFIED PROCESSING DATE--11SEP70
TITLE--SOME PROBLEMS OF THE STUDY OF GEOLOGICAL FORMATIONS -U-
AUTHOR--BOGOLEPOV, K.V. *B.*
COUNTRY OF INFO--USSR
SOURCE--GEOLOGIYA, I GEOFIZIKA, 1970, NR 1, (121) PP 39-49
DATE PUBLISHED-----70
SUBJECT AREAS--EARTH SCIENCES AND OCEANOGRAPHY
TOPIC TAGS--GEOLOGIC FORMATION, TECTONICS, SEDIMENTARY ROCK
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1986/1278 STEP NO--UR/0210/70/000/001/0039/0049
CIRC ACCESSION NO--AP0103162
UNCLASSIFIED

2/2 008

UNCLASSIFIED

PROCESSING DATE--11SEP70

CIRC ACCESSION NO--AP0103162

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE GEOLOGICAL BODIES DISTINGUISHED WITHIN THE SEDIMENTARY COVER ON THE BASIS OF DIFFERENT PURPOSES OF STUDY, STRUCTURAL, STRATIGRAPHICAL, GENETICAL, ARE NOT IDENTICAL AND MAY BE CROSSED IN THE SPACE. GEOLOGICAL FORMATIONS ARE CONSIDERED AS THE STRUCTURAL ELEMENTS OF THE SEDIMENTARY COVER, DISTINGUISHED BY THE STRUCTURAL SUBSTANTIAL SIGNS. THE FORMATION DETERMINATION AND THE WAY OF THEIR DIVISION ARE MADE MORE PRECISE. THE BOUNDARIES OF GEOLOGICAL FORMATIONS STUDY ARE DETERMINED AS THE MAIN DIVISION OF TECTONICS.

UNCLASSIFIED

Acc. Nr.: **AP0029114**

Ref. Code: UR 0246

PRIMARY SOURCE: Zhurnal Nevropatologii i Psikhatrii, 1970,
Vol 70, Nr 1, pp 65-71

THE NEUROLOGICAL SYMPTOMATOLOGY OF ATHEROSCLEROTIC
ANEURYSMS OF THE ABDOMINAL AORTA WITH LERICHE'S SYNDROME

N. K. Bogolepov, A. V. Pokrovskiy, N. P. Barinov

The report deals with an analysis of neurological disorders in 13 patients with atherosclerotic aneurysms of the abdominal aorta and with the syndrome of Leriche. The following neurological syndromes could be elicited in this form of pathology: 1) vegetative-trophic, 2) radicular-neuritic, 3) syndromes of spinal insufficiency - transitory and stable. The clinical picture as a rule was characterized by changes of the sacrolumbar plexus and its separate branches, changed vegetative innervation and affection of the spinal marrow. An analysis of neurological changes in this form of pathology as the authors assume, gives a supplementary criteria for early diagnosis, for the localization of the pathological process and the determination of the stage in the course of the disease.

REEL/FRA

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Acc. Nr: **AP0044666**

Ref. Code:

UR 0497

PRIMARY SOURCE: **Klinicheskaya Meditsina**, 1970, Vol 48,
Nr 2 , pp 61-67

HEMODIALYSIS IN THE TREATMENT OF ENCEPHALOPATHIA
IN ACUTE RENAL INSUFFICIENCY

N. K. Bogolepov, R. A. Aristova

Summary

Out of 73 patients suffering from acute renal insufficiency in 14 there was a marked encephalitic syndrome. These patients were combined in a group of encephalopathia. The prominent symptoms were disorder of the consciousness and transitory motor disturbances. If uremic coma supervenes an urgent hemodialysis is indicated. During hemodialysis different complications of the nervous system may be observed. The degree of hyperazotemia does not always correlate with the severity of functional disturbances of the nervous system, which are commonly concurrent with dyselectrolytemia and acidosis. Electroencephalographic investigations in a moderate azotemia point to significant diffuse changes of the electric activity. They may be caused by a disorder of the cerebral metabolism and testify to disturbance of cortical-stem interrelations.

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REEL/FRAHE

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USSR

UDC 616.831-07.:617.7-072.7

DOVEDOVA, Ye. L., BOGOLEPOV, N. N., and PUSHKIN, A. S., Brain Institute,
USSR Academy of Medical Sciences USSR

"Ultrastructural and Biochemical Characteristics of the Visual Analysor
After Prolonged Light Deprivation"

Moscow, Zhurnal Nevropatologii i Psikhatrii, No 7, 1973, pp 1,070-1,077

Abstract: Keeping rats in total darkness for 7 months caused ultrastructural and biochemical changes mainly in the ergastoplasm of visual analysor neurons. It also reduced the activity of enzymes of mediator and oxidative metabolism in the mitochondria and synaptosomes. The ultrastructural changes included increased numbers of ribosomes, enhanced osmiophilia of the hyaloplasm, deep invaginations of the nuclear membranes, and enlargement of some nucleoli. Abnormal enzyme activity was most pronounced in the lateral geniculate bodies. Monoamine oxidase, acetylcholine esterase, and potassium and sodium adenosinetriphosphatase activities diminished in the mitochondria of the superior colliculus. The commonest change both in the cortex and in the lateral geniculate bodies was the increased quantity of ribosomes in the cytoplasm of the neuron body.

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USSR

UDC 616-003.921.1.04-07:616.8-091.81-07

BOGOLEPOV, N. N., MATVEYEVA, T. S., DOVEDOVA, Ye. I., and VOROB'YEVA, T. V.,
Brain Institute, Academy of Medical Sciences USSR, Moscow

"Ultrastructural Changes in Nerve Cells Induced by Hypoxia"

Moscow, Zhurnal Nevropatologii i Psikhiiatrii, No 12, 1972, pp 1819-1827

Abstract: Optical microscopic examination of cortical neurons in rats exposed to hypoxia for varying periods revealed a great variety of morphological changes ranging from physiological activation to ischemia, karyocytolysis, and disappearance of whole groups of cells. Electron microscopy showed four types of ultrastructural changes, the severity varying with the duration of hypoxia: (a) presence of "dark" osmiophilic cells with increased electron density of the cytoplasm; (b) presence of cells with an increased number of lysosomes and dark osmiophilic granules; (c) various changes in the mitochondria; (d) changes typical of retrograde degeneration, i.e., shifting of the nucleus to the periphery, decrease in number of elements of granular reticulum, swollen mitochondria lacking in cristae. The associated biochemical changes were marked chiefly by the decreased activity of the oxidation enzymes. The data are analyzed from the standpoint of the mechanisms of the destructive and compensatory processes in the cerebral cortex during hypoxia.

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- 19 -

USSR

UDC 616-008.922.1.04-092.9-07:616.8-091.81-076.5

BOGOLEPOV, H. N., Laboratory of Electronic Microscopy, Institute of the Brain, Academy of Medical Sciences USSR, Moscow

"Pathomorphological Changes of Interneuronal Contacts in Experimental Hypoxia"

Moscow, Zhurnal Nevropatologii i Psikiatrii imeni S. S. Korsakova, Vol 72, Vyp 11, 1972, pp 1652-1655

Abstract: Submicroscopic changes in interneuronal contacts in the cerebral hemispheres of rats with hypoxia induced by placement in a closed space are examined. A large number of synapses differed from those in the control animals. Enlargement of the presynaptic fiber (to 2 μ m) and greater transparency of its cytoplasm occurred. The quantity of synaptic vesicles decreased; they formed compact groups at the presynaptic membrane or in the center of the presynaptic fiber. Abnormal short filaments appeared in the presynaptic fibers and changed mitochondria were observed, with reduced crist and occasional vacuole-like formations. Dark osmiophilic bodies more rarely appeared in the changed nerve fibers. The postsynaptic part of such synapses also changed. Dendrites lost their tubules and altered in their internal structure. A concept of "asynapsis" of functional dissociation of nerve complexes or isolated nerves is postulated. Changes of the synapses may be considered due to their

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BOGOLEPOV, N. N., Zhurnal Nevropatologii i Psikhatrii imeni S.S. Korsakova,
Vol 72, Vyp 11, 1972, pp 1652-1655

increased injury in comparison to other cell components, or in terms of a
defense reaction.

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1/2 008 UNCLASSIFIED PROCESSING DATE--04DEC70
TITLE--REGENERATION OF A CATALYST FOR VINYL ACETATE SYNTHESIS -U-

AUTHOR--(05)-KHACHEYAN, KH.YE., TSIRLINA, R.N., FEDOROVA, N.M., BOGOLEPOVA,
YE.I., LVOVA, L.N.
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CIRC ACCESSION NO--AA0136262

UNCLASSIFIED

PROCESSING DATE--04DEC70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A CATALYST FOR VINYL ACETATE
SYNTHESIS IS GENERATED BY TREATING IT WITH A CONCD. SOLN. OF KOH WHICH
REMOVES CU SALTS.

UNCLASSIFIED

USSR

UDC: 669.14:669.112.227.34:546.26:548.73

KREMNEV, L. S., ADASKIN, A. M., BOGOLYUBOV, A. V., Moscow Machine-tool Institute

"Determination of Concentration of Carbon in the Martensite of Steels Using the Asymmetry of Reflection Lines"

Moscow, Zavodskaya Laboratoriya, No. 9, 1971, pp 1086-1090

Abstract: A method has been developed for determining the concentration of carbon in the martensite of alloy steels, based on the dependence of the asymmetry of reflection lines on the spacing between doublets. The profile of the martensite line was approximated by analytic functions. The difference in the areas of the reflection lines located to the left and right of the ordinate of the center of gravity of the line is used to calculate the parameters of the component doublets and the shift between doublets. A theorem is proven, stating that in the case of coincidence of the sums of the ordinates of the doublets with the ordinates of an experimental profile of the reflection line, the expansion is unique. Dependences are produced for determination of the error in expansion and conditions of applicability of the method.

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